

OPERABLE UNIT 4 IM/IRA  
SUMMARY HABITAT AND BIOLOGICAL SURVEY REPORT

- Ute Lady's Tresses: The site of the proposed storage tank construction is located on an arid south to south-east facing slope which is too dry to support *Spiranthes diluvialis*. At the bottom of the slope, the drainage that will be crossed by the storage tank supply pipes is a dry and intermittent channel, lacking any species indicative of the level of moisture required for the presence of *Spiranthes*. The Department of Energy has therefore determined that there is no possibility for the occurrence of this federal endangered species on the OU4 project site.<sup>1</sup>
- Preble's Meadow Jumping Mouse: The preferred habitat of this subspecies of Western Jumping Mouse, *Zapus hudsonius preblei*, are moist lowland areas or riparian vegetation but may also include brush, brushy field, marsh, and woods with thick vegetation. No habitat with any of these characteristics exists on the proposed storage tank construction site or in the drainage crossed by the tank supply lines. The probability of occurrence of this species in the habitats that do exist on the project site, either for foraging, breeding, or nesting, is virtually non-existent. The destructive trapping ("Museum Specials") required to capture *Z. H. preblei* would severely damage other rodent populations and cannot be justified on scientific grounds<sup>2</sup>. The Department of Energy has therefore determined that, based on known habitat preferences, there is no reasonable probability for occurrence of this federal candidate (C2) species on the OU4 project site.
- Migratory Bird Habitat: The site of the proposed storage tank construction is a south to south-east facing slope vegetated by Blue Grama (*Bouteloua gracilis*), Western Wheatgrass (*Agropyron smithii*), and Purple Three-awn (*Aristida purpurea*), along with locally heavy infestations of tumble knapweed (*Acosta diffusa*). There are no shrubs or trees on the storage tank site. While this area may provide a forage ground for some raptor species, it lacks significant habitat values for breeding or nesting migratory bird species. The drainage crossed by the tank supply lines offers similar depauperate habitat values for migratory bird activities. There is a stand of trees and shrubs north and north-east of the drainage near the OU4 pumphouse which do provide significant habitat values for migratory birds. These trees and shrubs will not, however, be impacted by either construction activities or operation of the OU4 pump system. The Department of Energy has therefore determined that, based on existing habitat values, activities on the OU4 project site will not adversely impact migratory bird species or habitat.<sup>3</sup>
- Platte River Hydrology: OU4 IM/IRA activities consist of changing the present evaporation system (i.e., use of solar evaporation ponds) to use of forced evaporation with flash evaporators. Ground and surface water will continue to be collected by the interceptor trench system and instead of being discharged to the solar ponds will be routed to temporary storage tanks and subsequently treated by the flash evaporators.<sup>4</sup> The evaporator system is completely contained and will be located in Building 910. Vapors from the evaporation process will be directed to a condenser and

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<sup>1</sup>Based on a survey conducted March 2, 1992 by Dr. David Buckner, a plant ecologist recommended by the U.S. Fish & Wildlife Service as the local expert on the life history of *Spiranthes*.

<sup>2</sup>Based on a communication between U.S. Fish & Wildlife Service and Dr. Jim Fitzgerald, University of Northern Colorado, a local expert on the life history and trapping characteristics of *Zapus*.

<sup>3</sup>Based in part on a walking visit to the site on March 2, 1992 by Dr. Bruce K. Hope and Mr. Richard C. Flory, EG&G Environmental Management Department.

<sup>4</sup>Per Don Ferrier (x8957), EG&G Waste Operations Department.

the condensate pumped into a temporary holding tank and tested for quality. After meeting clean water specifications, the distillate (approximately 9 acre-feet/year) will be pumped into the RFP raw water system and utilized for industrial purposes on plantsite<sup>5</sup>. The Department of Energy has determined that no net changes in discharge to the Platte River Drainage system are anticipated with implementation of the OU4 IM/IRA.

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<sup>5</sup>EG&G, 1991. "Solar Ponds Interceptor Trench System Groudwater Management Study; Task 7 of the Zero-Offsite Water-Discharge Study."